

ENGINEER TECHNICIAN II

Department: Public Works
Division: _____
Reports to: Public Works Director & City Engineer

Classification/Grade: M-3A
FLSA Status: Exempt
Date Approved: _____

Job descriptions/specifications are only intended to present a descriptive summary of the range of duties, tasks, and responsibilities associated with a specified position. Therefore, descriptions/specifications may not include all duties performed by the individual. In addition, descriptions/specifications are intended to outline the minimum qualifications necessary for entry into the position/class and do not necessarily convey the qualifications of incumbents within the position/class.

DEFINITION

Under the supervision of the Public Works Director and City Engineer performs paraprofessional level civil engineering duties primarily in the technical evaluation of basic to moderately complex projects.

ESSENTIAL JOB FUNCTIONS AND RESPONSIBILITIES:

(Essential functions are those functions that the individual who holds the position must be able to perform unaided or with the assistance of reasonable accommodation.)

1. Serve as a representative of the City of Mesquite, demonstrating a positive attitude and progressive actions through the display of professionalism, courtesy, and appropriate tact and discretion in all interactions with other employees and with the public.
2. Review development requests for conformance with engineering principles and practices, and for compliance with City, State, and Federal requirements governing the various engineering disciplines and issues.
3. Perform construction inspections.
4. Plan review.
5. Review construction plans and related documents for improvement projects in the City.
6. Review civil construction plans (improvement plans and utility site plans) and related documents for all development, re-development, and improvement projects in the City.
7. Functions as a project manager for improvement plans from initial plan submittal through approval of the final plan, and through the construction phase.
8. Plan, coordinate and review work plans for assigned projects.
9. Provide administrative and technical direction to department staff.
10. Coordinate activities with other divisions, City departments, outside agencies and organizations.
11. Design and direct special engineering studies, including analyses, reports, drawings, models and displays.
12. Review and approve a variety of engineered plans.
13. Make general engineering and plan checking calculations for public works projects.
14. Maintains and updates physical and electronic improvement plan records.
15. Prepares quantity and cost estimates for construction projects.
16. Make construction inspection at site to confirm contractual compliance to engineering and construction standards; may check the test results made by Para-professional engineering personnel on slump test, soil tests, cement and asphalt mix test.
17. Performs structural design work on structures, storm sewer replacement projects, street improvement and repair projects, parks and recreational facility projects as necessary.
18. Issue construction permits for work on **Right Of Way** and distribute, approve and issue utility permits for work on ROW.
19. Coordinate work with other City departments and utilities.

20. Develop, compile and maintain daily activity records, reports, procedures, communications, letters and files utilizing City computer systems.
21. Answer questions from and give information to the public concerning assigned department's function, procedures, policies, etc.
22. Research, compile and analyze information for special projects.
23. Perform receptionist duties.
24. Be dependable and meet acceptable attendance requirements at all times.
25. Follow all applicable safety rules and regulations.
26. May supervise and evaluate the performance of public works inspectors and others as assigned.

OTHER JOB FUNCTIONS:

- A. Perform other related duties as assigned.

QUALIFICATIONS:

The degree of knowledge and ability as outlined under this section under this section is that which is necessary to satisfactory perform the essential functions of this position.

Knowledge of:

- Applicable federal and state laws, codes and regulations, including those related to development, design, construction, and public works engineering.
- City Public Works Standard Specifications and State Standard Specifications.
- Principles and practices of civil engineering related to the planning, design, construction and inspection of municipal public works.
- Mathematics related to Engineering.
- Methods and techniques of scheduling work assignments.
- Principles, practices and techniques of program development, administration and evaluation.
- Principles and practices of construction management.
- Construction materials and materials testing in the field and laboratory.
- Microcomputer engineering applications.
- Principles and practices of appropriate safety precautions and procedures.
- Surveying techniques and practices.
- Engineering maps and records.
- Modern office procedures, methods and computer equipment, programs, engineering software programs, applications and uses.
- English language, spelling, grammar and punctuation.
- Specific departmental policies and procedures desired.
- Methods and techniques for record keeping and report preparation.

Ability to:

- Interpret construction plans and specifications and to determine conformance with established policies, regulations and applicable laws.
- Prepare engineering plans, specifications, and calculations.
- Interpret, implement, explain and apply applicable laws, codes, regulations, standards, policies and procedures.
- Perform detailed analysis of designs, specifications and plans.
- Apply engineering principles and techniques to evaluating and solving simple to difficult civil engineering problems.
- Exercise sound, independent judgment in managing assigned projects.
- Develop and coordinate work programs.
- Develop and administer operational and construction project budgets.
- Manage contracts.
- Read and interpret maps, sketches, drawings, specifications and technical manuals.

- Develop and maintain accurate record keeping systems.
- Perform difficult technical computations and make estimates of materials and cost.
- Detect substandard design, materials and workmanship in construction projects.
- Prepare comprehensive technical reports.
- Establish and maintain an effective working relationship with co-workers, elected officials, advisory body members, developers, contractors, engineers and the general public.
- Plan, organize, manage, direct, assign and supervise the work of subordinates.
- Type at a speed necessary for adequate job performance.
- Plan assigned work for off-site inspections.
- Communicate clearly and effectively both orally and in writing.
- Understand and carry out oral and written instructions.
- Prioritize schedule and work tasks and complete work within specified time periods and deadlines.
- Observe safety principles and work in a safe manner.
- Operate a variety of equipment and machinery requiring continuous or repetitive arm-hand movements.

Special Requirements

Residency Requirement: Must be able to respond within 20 minutes from residence.

Experience, Education & Training:

Any equivalent combination of training, education and experience which provides the individual with the required knowledge, skills, and abilities to perform the job. A typical way to obtain the required knowledge and abilities would be:

Education: Bachelor's degree in Civil Engineering or a closely related field.

Experience: 5 years experience in Civil Engineering design, construction, review, and project management is highly desirable.

Training:

License or Certificate: Must possess, at the time of employment and continuously throughout employment, a valid driver's license.

WORKING CONDITIONS:

Work is performed under the following conditions:

Duties are primarily performed both in an office environment while sitting at a desk or computer and outside in varying and extreme weather conditions for extended periods of time

Physical Requirements:

Physical demands of the job are subject to high levels of public contact and frequent interruptions; manual dexterity required; audiovisual and linguistic acuity requirements. Physical exertion is present due to frequent sitting, standing, walking, bending, twisting, stooping and reaching. Physical effort is required to perform heavy manual labor in confined spaces and uncomfortable conditions; regular lifting/carrying/pushing or pulling heavy objects and equipment ranging in weight from 25 to 100 lbs; flexibility of work hours, requires weekend, holiday and evenings.

Job Hazard/Risk Factors:

Employees risk physical hazard from mechanical and electrical equipment, dust, noise and traffic hazards. Exposure to bio hazards such as raw sewage, live sewer systems, sewer lift stations human debris, drug paraphernalia; heavy equipment, working in and around trenches, hazardous gases, fumes, paint, chemicals, pesticides and herbicides.

The City of Mesquite is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodation to qualified individuals. The City of Mesquite encourages both incumbents and individuals who have been offered employment to discuss potential accommodations with the employer.

Revised & approved: 2006
July 2008
October 2009